

# **Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford and River Corridor Closure Project**

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233-S awaits final disposition as training on the wall saw equipment continues.



200 Area common drilling augers

## OVERVIEW

This section addresses Project Baseline Summary (PBS) RL-0040, *Nuclear Facility D&D, Remainder of Hanford*. There are three major components to this work scope:

- Deactivation and Decommissioning (M. B. Lackey);
- Reliability Projects (M. B. Lackey); and
- Waste Site Remediation (R. T. Wilde).

This section includes PBS RL-0041, *Nuclear Facility D&D, River Corridor Closure Project*, until this work scope transitions to the new River Corridor Contractor.

NOTE: Unless otherwise noted, all information contained herein is as of the end of December 2003.

## NOTABLE ACCOMPLISHMENTS

### Deactivation and Decommissioning



**233-S Demolition:** Following the successful completion of the Phase 1 (shear) demolition of 233-S lower structure, Phase 2 (wall saw) preparations were completed for the remaining process hood installation interferences on the process hood outer structure. Wall sawing was initiated on January 19, 2003.

**U Plant Canyon Demolition Ready:** Regulator comments were incorporated into the Feasibility Study/Proposed Plan for the Canyon Disposition Initiative (U Plant), and the document was transmitted to RL on December 10, 2003. RL forwarded the revised Feasibility Study/Proposed Plan to the Environmental Protection Agency (EPA) and the Washington State Department of Ecology on December 29, 2003, for final Region 10 and legal review prior to approval for public comment.

**224-B and 224-T Demolition:** The 30-day public comment period for the 224-B Engineering Evaluation/Cost Analysis (EE/CA) began on December 15, 2003. The notification for the 224-T EE/CA was issued to stakeholders on December 11, 2003, enabling the 45-day public review period to start on January 12, 2004.

### Reliability Project

**Project L-387, 2101M Change Rooms and Lighting Safety Improvements:** This project replaced the existing lighting in the warehouse bays of Building 2101M, and remodeled two men's and one women's change rooms. The warehouse bay lighting modifications were required to replace the fluorescent light fixtures that had ballasts containing Polychlorinated Biphenyls (PCB) material. Approximately 65 percent of the warehouse bay light fixtures were out of service due to PCB leaks or leak potential. The remodel of three existing change rooms was needed to correct sanitation and industrial health issues. Construction related to the change room modifications was completed by December 5, 2003, and the change rooms were placed in service on December 8, 2003. The high-bay light fixtures were installed and in operation, as scheduled, by December 18, 2003.



## Waste Site Remediation

**U Plant Regional Acceleration:** EPA Region 10 comments on Draft B of the U Plant Waste Sites Area Closure Focused Feasibility Study/Proposed Plan were received on December 12, 2003. Comment resolution will be obtained prior to the issuance of the Record of Decision, which is expected in June.

**200 Area Common:** Drilling augers were used to complete the physical property characterization field investigation activities at the Area C burrow site on December 19, 2003. This material is being characterized for suitability for use in the construction of the waste site surface barriers as part of the 200 Area Waste Site Remediation efforts.

**BC Crib Acceleration:** The drilling of the remedial investigation borehole at the 219-B-58 trench was completed on December 22, 2003. Drilling at the 216-B-26 trench continues, and is expected to be completed mid-January.



## FY 2004 FH FUNDS VS ACTUAL (\$000)

	FY 2004 Anticipated Funding w/Carryover	FY 2004 Fiscal Year Spend Forecast	Variance
<b>RL-0040</b> Nuclear Facility D&D, Remainder of Hanford	\$ 80,399	\$ 81,513	\$ -1,114
<b>RL-0041</b> Nuclear Facility D&D, River Corridor Closure	\$ 12,654	\$ 11,632	\$ 1,022
<b>Total</b>	<b>\$ 93,053</b>	<b>\$ 93,145</b>	<b>\$ -92</b>

The 300 Area work scope pending transition to the River Corridor Closure contractor is currently reflected in the funding for the full year; however, the baseline only reflects work scope through December. An estimate for the 300 Area Surveillance and Maintenance Program is being prepared for transmittal to RL by January 22, 2004. RL will use the estimate to provide guidance on the work scope to be continued in the 300 Area for the remainder of the FY.

## FY 2004 SCHEDULE/COST PERFORMANCE (\$000)

		Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
<b>RL-0040</b>	Nuclear Facility D&D, Remainder of Hanford	16,727	14,178	15,877	-2,549	-15%	-1,699	-12%	84,705
	Nuclear Facility D&D, River Corridor Closure	3,222	2,384	2,469	-838	-26%	-86	-4%	3,222
<b>RL-0041</b>									
	<b>Total</b>	<b>19,948</b>	<b>16,561</b>	<b>18,346</b>	<b>-3,387</b>	<b>-20%</b>	<b>-1,785</b>	<b>-11%</b>	<b>87,927</b>

**NOTE:** Numbers are rounded to the nearest \$K.

**Schedule Performance (\$-3,387K/-20 %):** The unfavorable schedule variance in the Deactivation and Decommissioning Project is primarily due to weather effects earlier this year on the 233-S demolition project. The revised working schedule reflects an April 15, 2004, demolition completion with waste packaging and project close-out completion by June. Also contributing to the unfavorable schedule variance are delays in mobilization and engineering studies at 224-B/224-T/U Plant due to resource availability, delays in issuance of the 224-B/224-T EE/CA's due to redirection of the "plug-in" approach, and not starting U Plant ancillary facilities activities due to FY 2004 funding reductions.

The unfavorable schedule variance for the 200 Area Waste Site Cleanup is due to delays in drilling at Z-9 (200-PW-1) because significant contamination has been encountered below the ground surface and high levels of carbon tetrachloride have been detected in the drill cuttings. The drilling is now planned for completion during February 2004. Later than planned agreement of the Draft B Proposed Plan remedies has delayed the design work associated with crib stabilization, surface barriers, and excavation for U Plant Regional Closure. Borehole drilling at the BC Control Area has been delayed during the resolution of regulatory comments for the 216-B-26 borehole Sampling Analysis Plan and Waste Control Plan.

The FY 2004 300 Area baseline (PBS RL-0041) covers scope through fiscal month end December. The transition work scope was planned in December, but work scope has not been initiated.

These variances are somewhat offset by the favorable schedule variance in Reliability Projects which is due to positive progress in completion of FY 2003 carryover work scope (Project L-437, *Route 11A Road Overlay*; and Project L-347, *Radio Frequency Migration*).

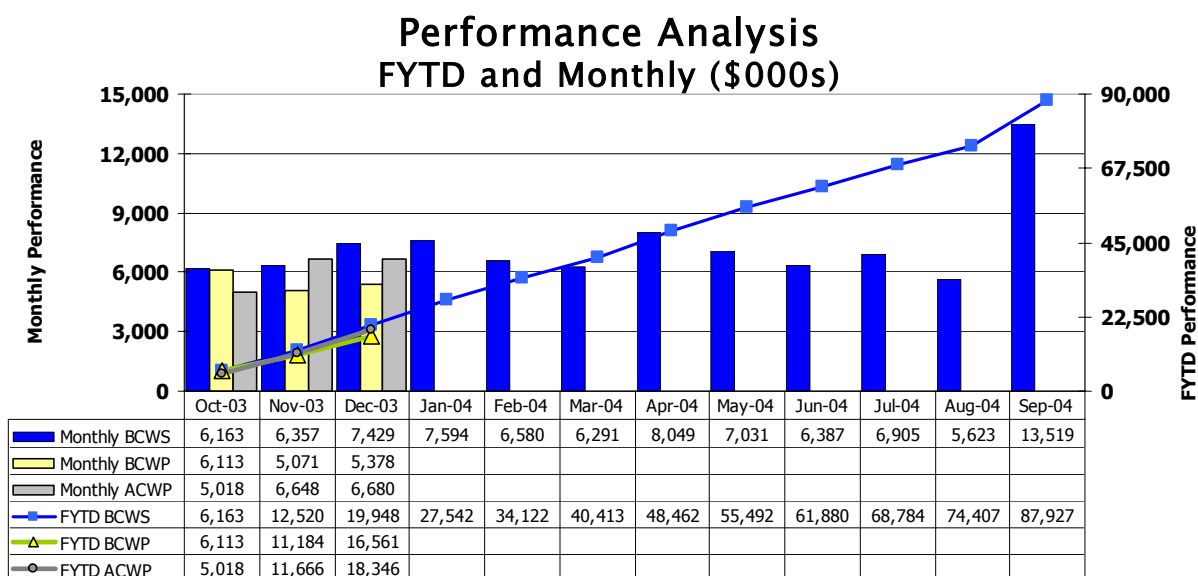
## FY 2004 SCHEDULE/COST PERFORMANCE, CONTINUED

**Cost Performance (\$-1,785K/-11%):** The unfavorable variance for Deactivation and Decommissioning is due to 233-S demolition activities being more extensive, requiring retention of resources (personnel and equipment) for a longer period of time (approximately five months).

The unfavorable cost variance for 200 Waste Site Cleanup is due to Z-9 (200-PW-1) requiring more labor than planned due to higher levels of contamination than expected. The 200-PW-2 Remedial Investigation work that was delayed from FY 2003 has had increased equipment replacement costs, increased stand-by time costs, and extra sample shipping and packaging costs due to the 21-G-10 field work.

The unfavorable variances are offset by efficiencies in the surveillance and maintenance of facilities and waste sites.

The closure services allocation underrun is a result of work transfer alignments (e.g., 222-S transfer and increases in PBS RL-0040 for approved baseline change requests) and management's hold on scope potentially cut by the FY 2004 appropriation.



## MILESTONE ACHIEVEMENT

PBS	MSN	Title	Type	Due Date	Actual Date	Forecast Date	Status Comments
CP01	TRP-03-227 M-015-41C	Submit 200-TW-1 & 200-TW-2 OU FS/Proposed Plan to EPA & Ecology	HQ	03/31/04			On schedule
CP01	TRP-03-230 M-015-39B	Submit 200-CS-1 Chemical Sewer Group RI Report	HQ	05/31/04			On schedule
CP01	TRP-03-224 M-013-00N	Submit 1 200 NPL RI/FS (RFI/CMS) Work Plan	HQ	06/30/04			On schedule
CP01	TRP-03-233 M-015-43B	Submit 200-PW-2 OU RI Report Including Past Practice Waste Sites	HQ	06/30/04			On schedule
CP01	TRP-03-309	233-S (PuConcentration Facility) and the 233-SA (Exhaust Filter Building) demolished to slab on grade.	RL	6/30/04		1/15/04	Ahead of schedule
CP01	TRP-03-501 M-092-11-T01	Complete Disposition Options for Hanford Site Nonradioactive NA	RL	09/28/04			On schedule
CP01	TRP-03-236 M-016-66	Initiate Interm. Des.& Auth for RA at 618-10&11	HQ	09/30/04			On schedule
CP01	TRP-03-242 M-015-40C	Submit 200-CW-5 U Pond/Z Ditches Cooling Water Group FS & Submit	HQ	10/31/04			On schedule
CP01	TRP-03-139 M-013-00O	Submit 1 200 NPL RI/FS (RFI/CMS) Work Plan	HQ	12/31/04			On schedule
CP01	TRP-03-260 M-015-46A	200 Areaa Chemical Lab Waste OUs Remedial investigation Report.	HQ	10/31/05			On schedule
CP01	TRP-03-245 M-015-39C	Submit 200-CS-1 Chemical Sewer Group FS and Submit PP/Proposed	HQ	11/30/05			On schedule
CP01	TRP-03-248 M-020-39	Submit 216 S-10 Pond and Ditch Closure Plan to Ecology	HQ	11/30/05			On schedule
CP01	TRP-03-254 M-015-43C	Submit 200-PW-2 OU FS & Proposed Plan/Proposed RCRA Permit Mod	HQ	12/31/05			On schedule
CP01	TRP-03-257 M-020-33	Submit Closure/Post Closure Plans for 216-A-10 Crib, Etc.	HQ	12/31/05			On schedule
CP01	TRP-03-263 M-015-44A	200-MW-1 OU Remedial Investigation Report	HQ	12/31/05			On schedule
CP01	TRP-03-266 M-015-46B	200 Area Chemical Laboratory Waste OUs Feasibility Study	HQ	09/30/06			On schedule
CP01	TRP-03-272	Remediate BC Crib, Trenches, and Control Area	RL	09/30/06			On schedule
CP01	TRP-03-303	U Plant Regional Closure (ancillary facilities, excluding U Plant Canyon)	RL	9/30/06			On schedule
CP01	TRP-03-30C	U-Plant ready for demolition	CNTR	9/30/06			On schedule -
CP01	TRP-03-312	224-B (Concentration Facility) demolished to slab on grade.	RL	9/30/06			On schedule - Potential GFS impacts
CP01	TRP-03-315	224-T (Transuranic Storage & Assay Facility) demolished to slab on grade.	RL	9/30/06			On schedule - Potential GFS impacts
RC06	TRP-04-901 M-92-15	Complete Removal and Transfer, and Initiate Storage of Phase II 300 Area SCW and Materials	EA	9/30/04	9/19/01		Completed ahead of schedule